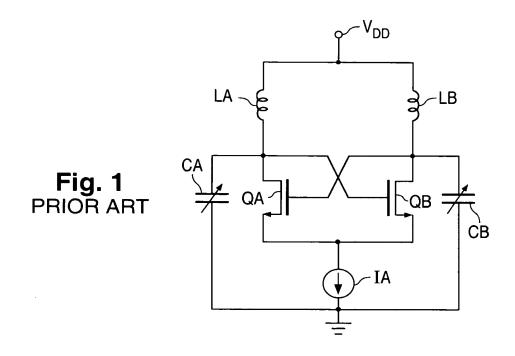
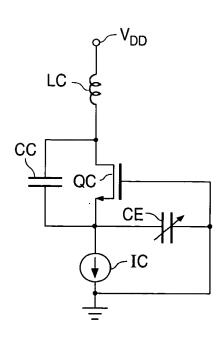


Inventor: Bulucea

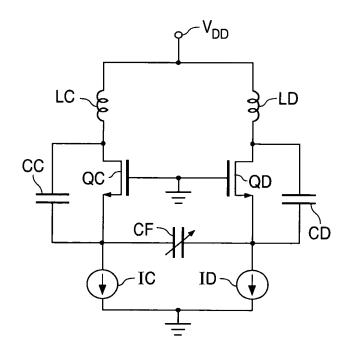
Serial No. 09/903,059 Do

1/19

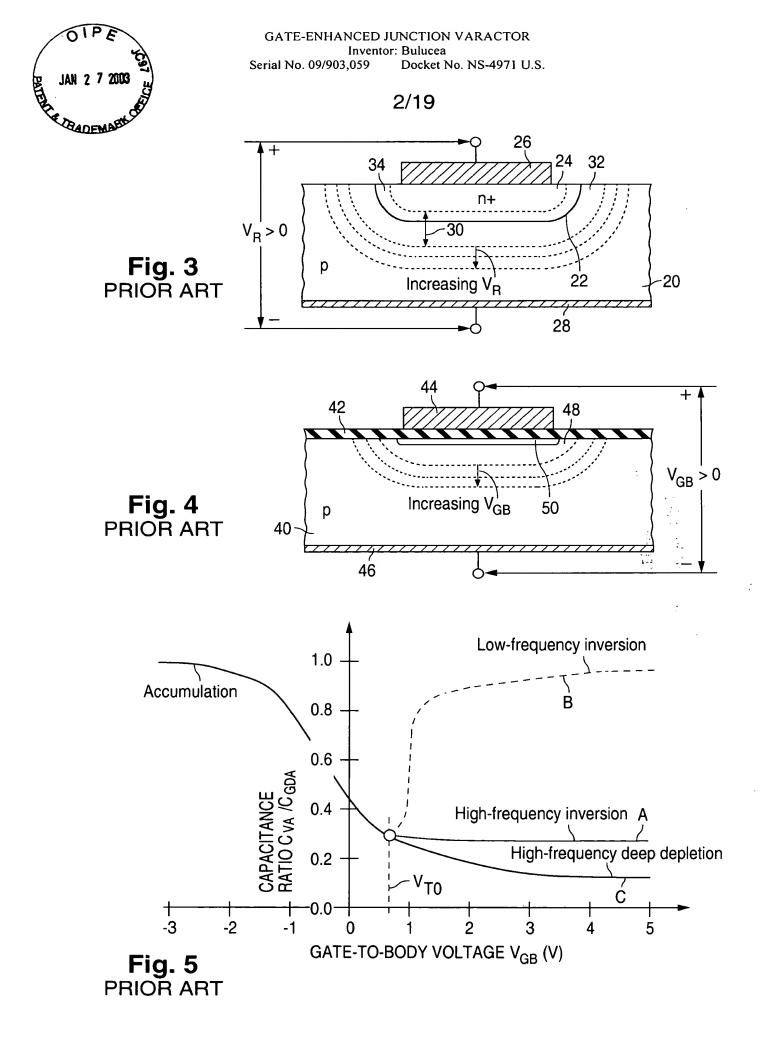




**Fig. 2a** PRIOR ART



**Fig. 2b** PRIOR ART



# JAN 2 7 2003

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059 Docket No. NS-4971 U.S.

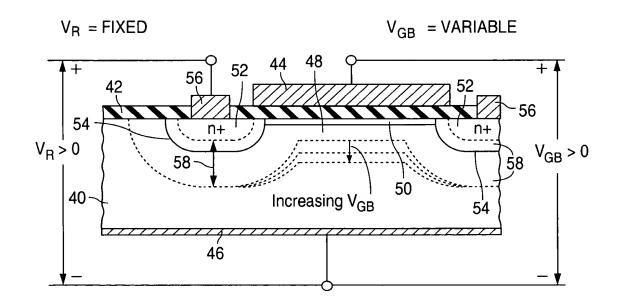


Fig. 6 PRIOR ART

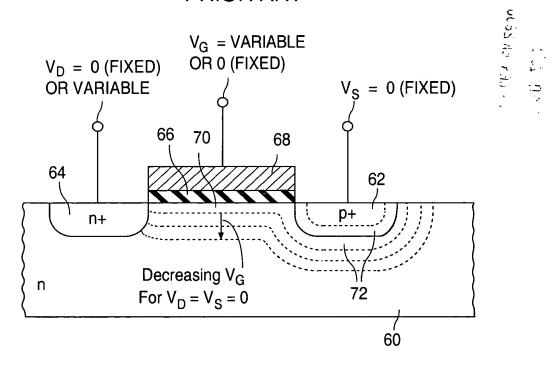
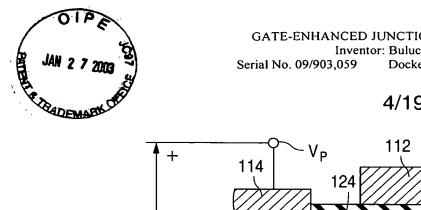
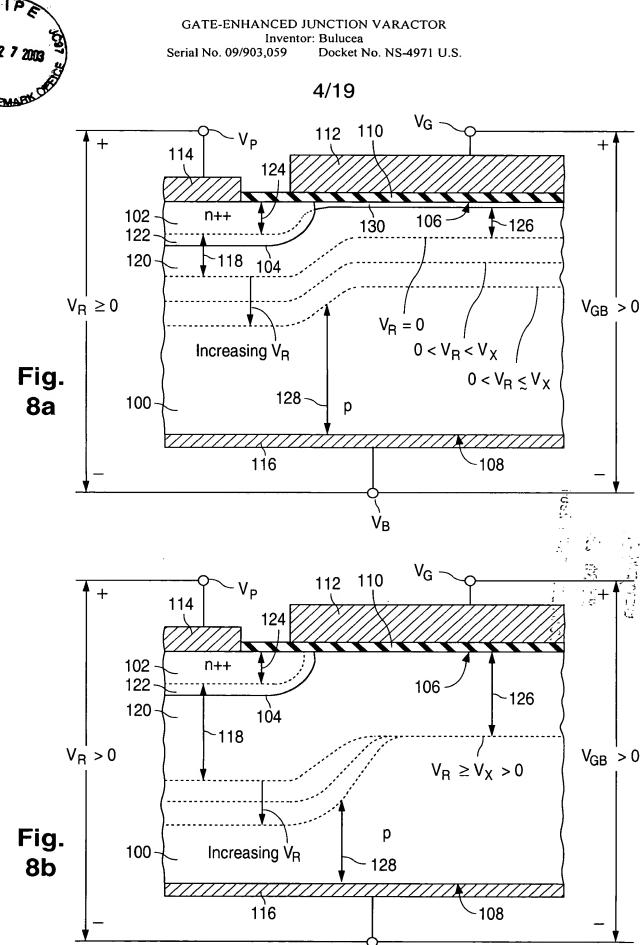


Fig. 7
PRIOR ART





 $\dot{V_B}$ 



Inventor: Bulucea

Serial No. 09/903,059

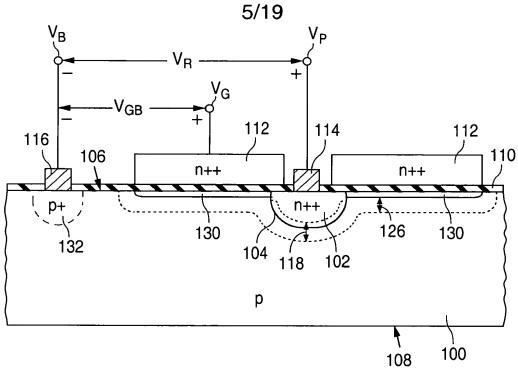
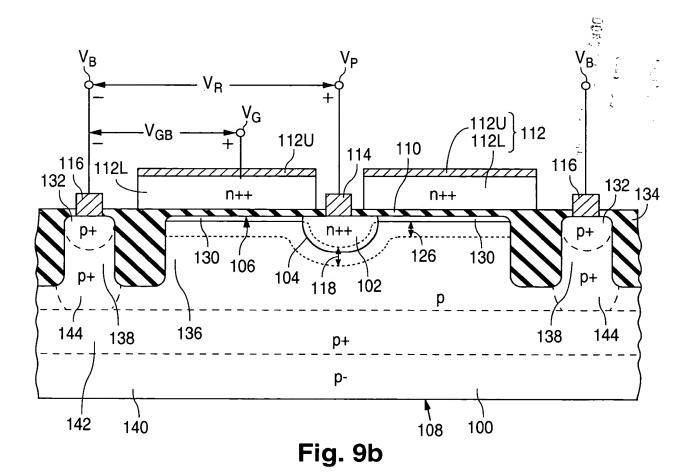
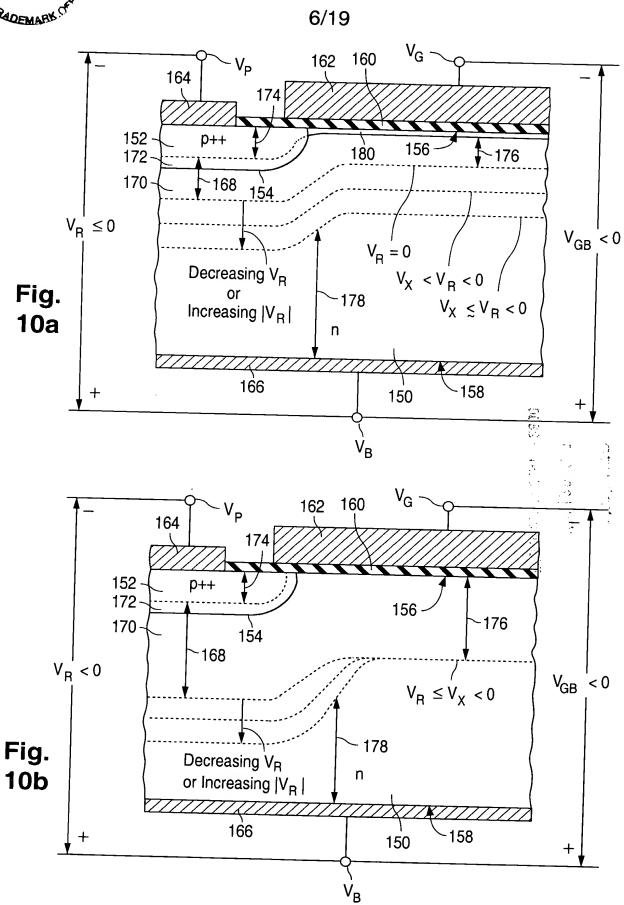


Fig. 9a





Inventor: Bulucea Serial No. 09/903,059 Docket N Docket No. NS-4971 U.S.





Inventor: Bulucea

Serial No. 09/903,059 Docket No. NS-4971 U.S.

7/19

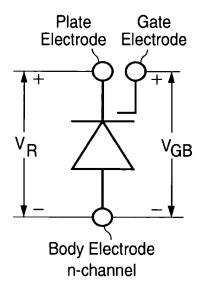


Fig. 11a

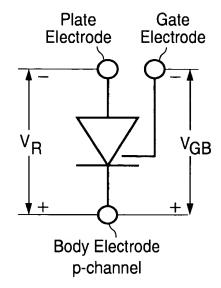


Fig. 11b

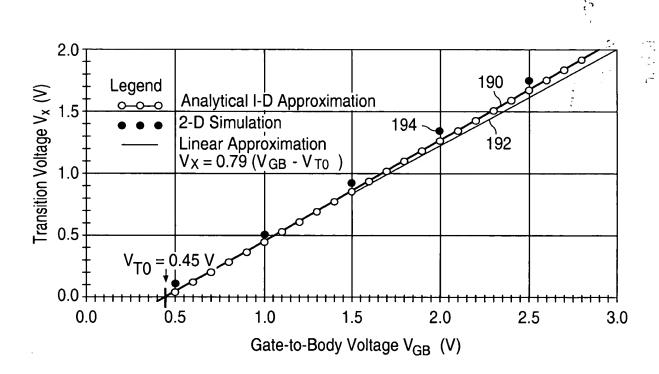


Fig. 12

### JAN 2 7 2003

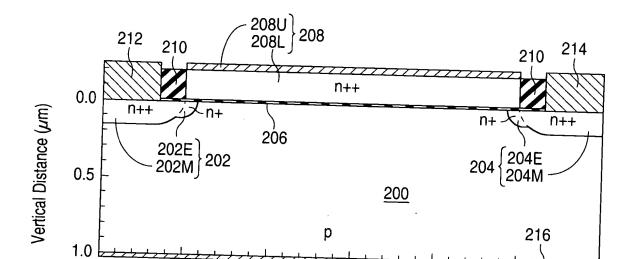
0.0

0.5

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea
Serial No. 09/903,059 Docket No. NS-4971 U.S.

8/19



1.0

Fig. 13

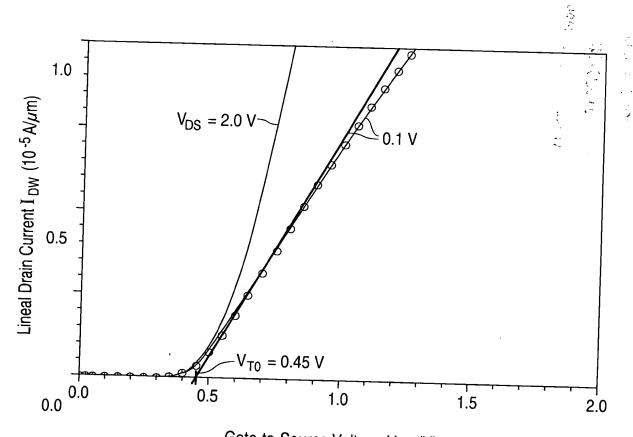
1.5

Lateral Distance (µm)

2.0

2.5

3.0



Gate-to-Source Voltage  $V_{GS}$  (V)

Fig. 14

## DAN 2 7 2003

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059

Docket No. NS-4971 U.S.

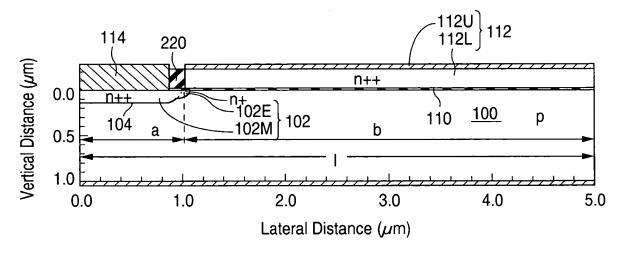


Fig. 15

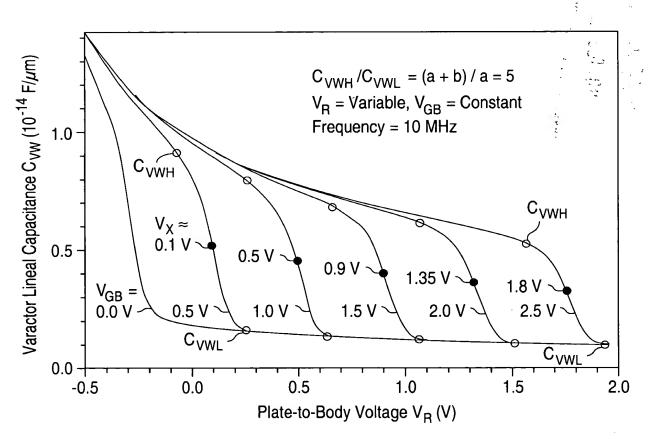


Fig. 16

## OIPE SCOTION OF THE PROPERTY O

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059

Docket No. NS-4971 U.S.

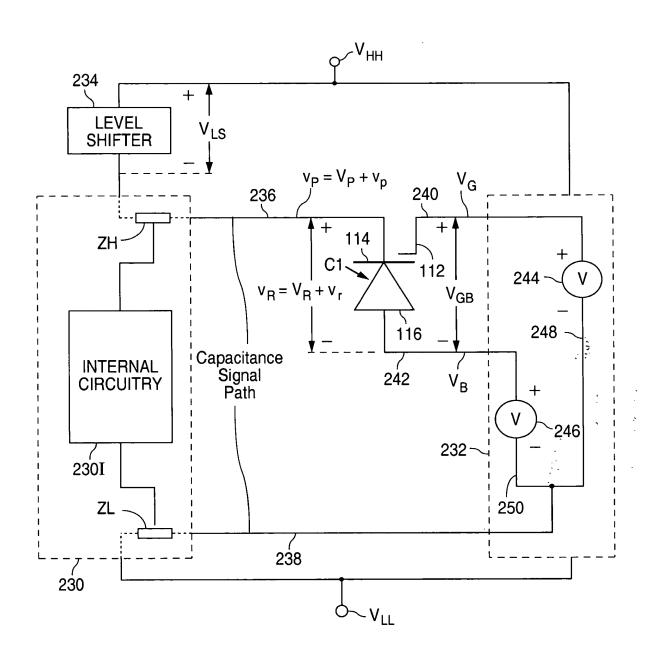


Fig. 17

### OIPE (CS)

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059

Docket No. NS-4971 U.S.

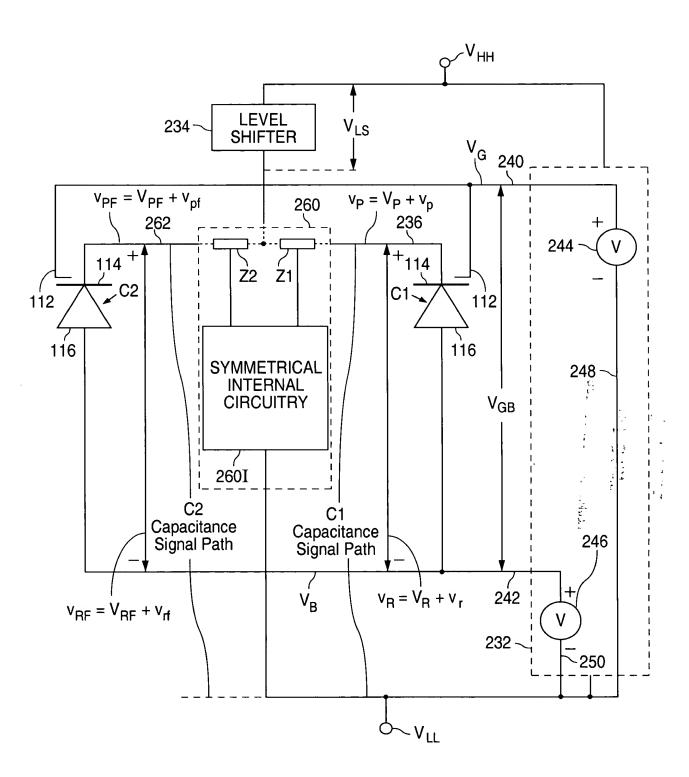
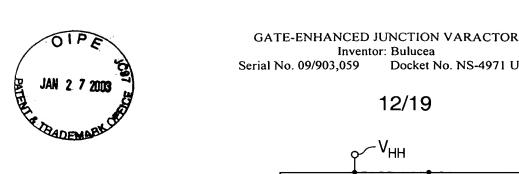
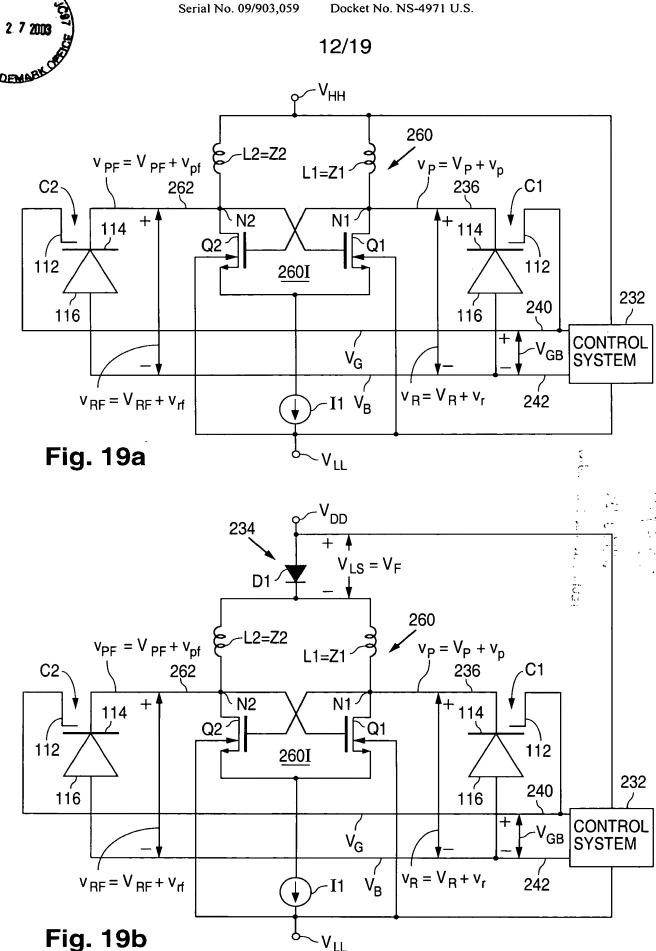


Fig. 18



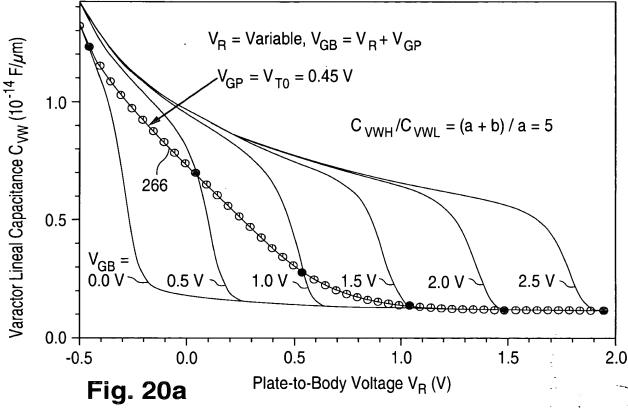


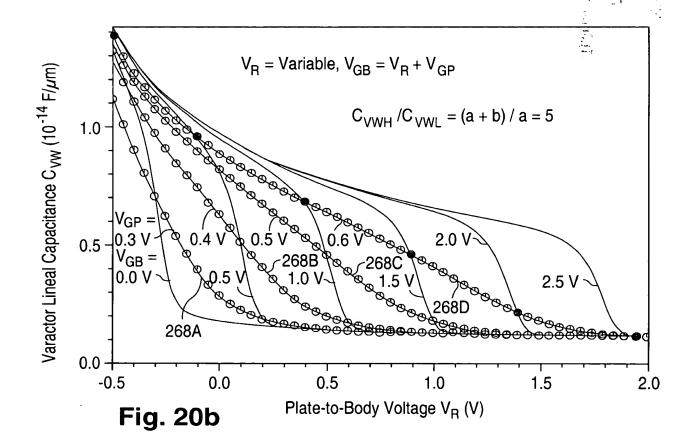


Inventor: Bulucea

Serial No. 09/903,059







## D JAN 2 7 2003

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059

14/19

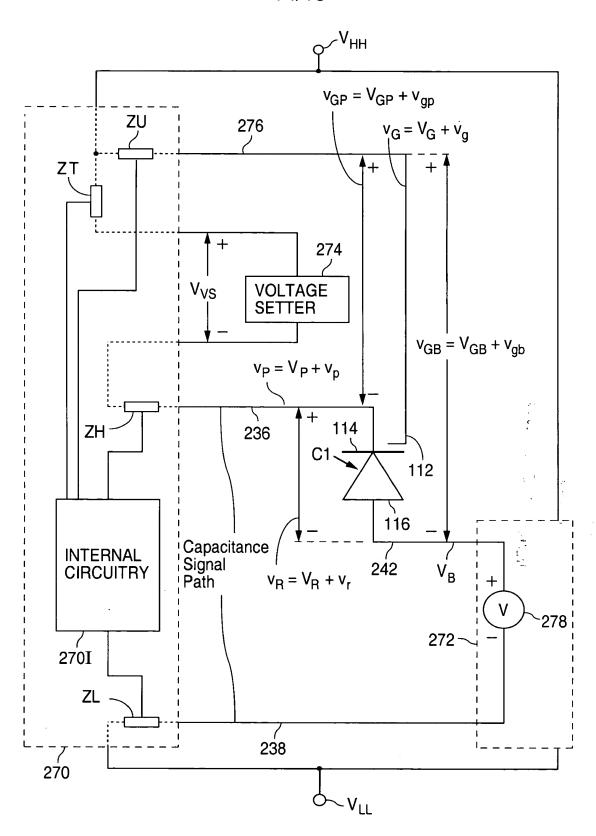


Fig. 21

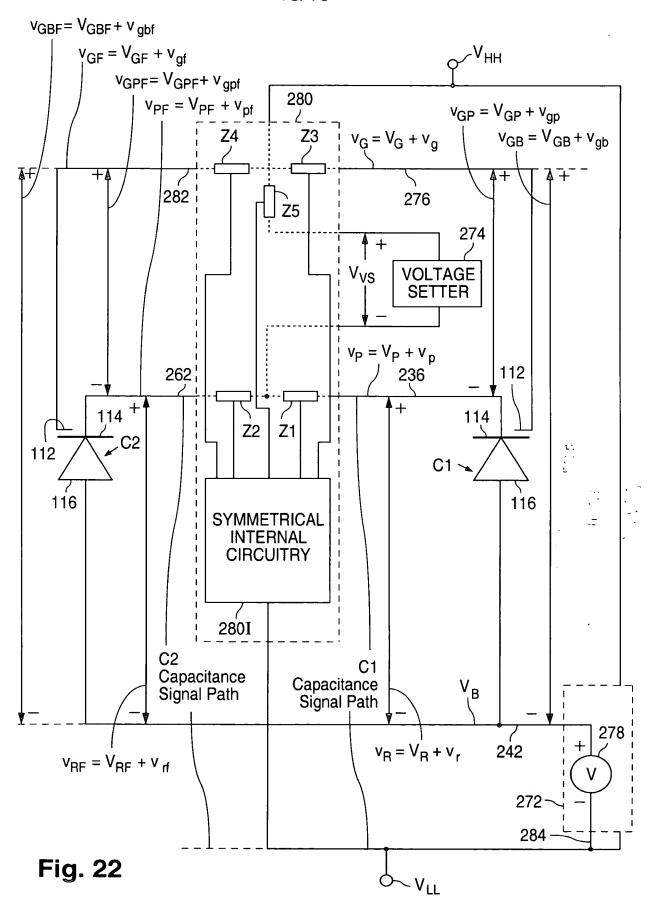
### JAN 2 7 2003 L

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059

15/19



### OIPE EN 2 7 200 UN 2 7

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059

Docket No. NS-4971 U.S.

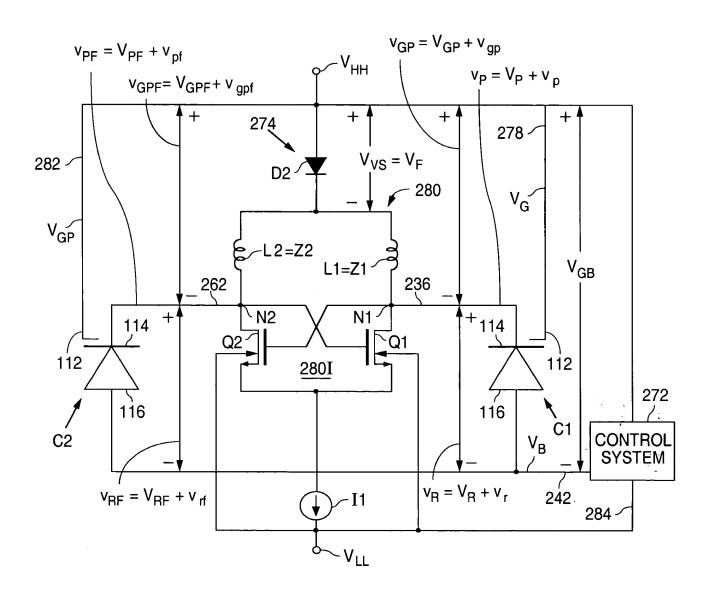


Fig. 23a



Inventor: Bulucea

Serial No. 09/903,059 Docket No. NS-4971 U.S.

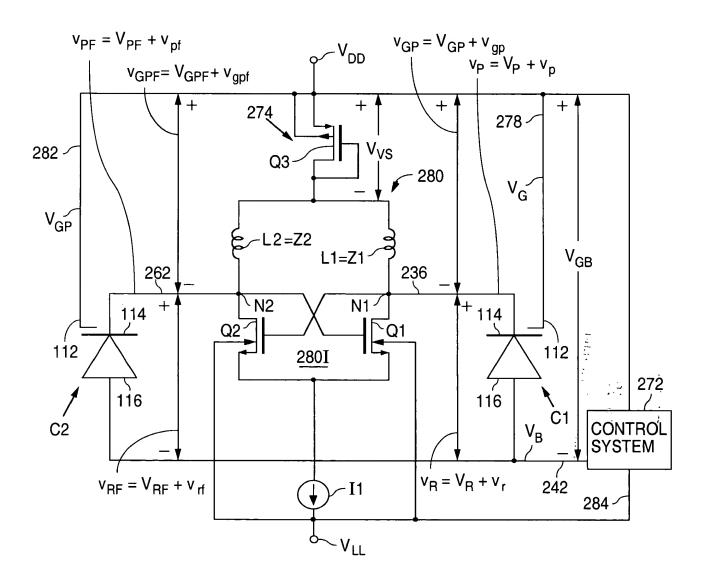


Fig. 23b



Inventor: Bulucea

Serial No. 09/903,059

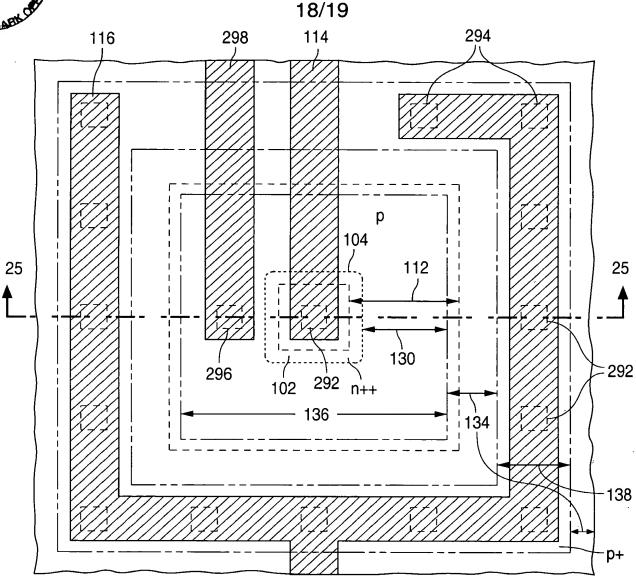
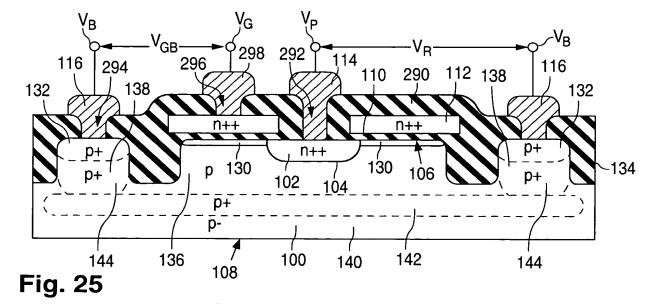


Fig. 24



JAN 2 7 2003

### GATE-ENHANCED JUNCTION VARACTOR

Inventor: Bulucea

Serial No. 09/903,059

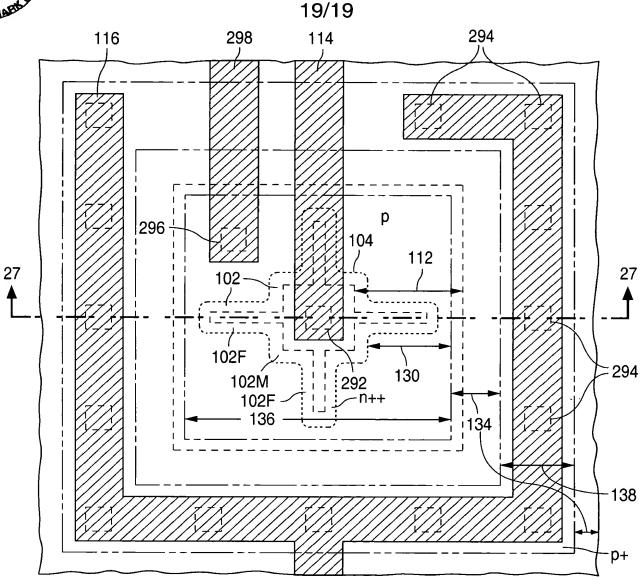


Fig. 26

